Table C14. Percent Recovery of Individual Hydrocarbons and Diesel Fuel from Spiked Ribbed Mussel Samples.

Sample ID	Batch No	Tissue Matrix	Nonane (n-C <sub>9</sub> )	Decane (n-C <sub>10</sub> )	Undecane (n-C <sub>11</sub> )	Dodecane (n-C <sub>12</sub> )	Tridecane (n-C <sub>13</sub> )	Tetradecane (n-C <sub>14</sub> )	Pentadecane (n-C <sub>15</sub> )	Hexadecane (n-C <sub>16</sub> )	Heptadecane (n-C <sub>17</sub> )	Pristane	Octadecane (n-C <sub>18</sub> )	Phytane	Nonadecane (n-C <sub>19</sub> )	Eicosane (n- $\mathrm{C}_{20}$ )	Heneicosane $(n-C_{21})$	Docosane (n- $\mathrm{C}_{22}$ )	Tricosane (n- $C_{23}$ )	Tetracosane (n- $C_{24}$ )	Pentacosane (n-C <sub>25</sub> )
197020431 <sup>1</sup>	1	NIST SRM1974a	10.3	41.3	54.9	68.7	78.0	83.6	86.4	87.4	84.9	86.8	88.0	87.0	93.6	89.7	80.1	88.2	90.8	91.4	92.4
297031709 <sup>2-4</sup>	2	Depurated Mussel Homogenate	185	23.6	52.1	57.9	62.0	81.2	82.0	94.1	87.9	81.2	81.9	74.2	93.4	100	569	650	1740	318	0.00
497051416 <sup>5</sup>	3	Depurated Mussel Homogenate	7.70	4.16	8.00	13.9	26.9	47.2	62.5	74.9	79.9	79.2	83.6	82.1	82.1	86.9	131	100	90.9	88.2	88.4

<sup>1 25</sup>μg of each individual hydrocarbon was spiked into a tissue matrix made from NIST SRM1974a (Organics in Mussel).

<sup>&</sup>lt;sup>2</sup> 1000μg of Restek Diesel Fuel Oil #2 Standard (Cat. No 31233) was spiked into a mussel tissue homogenate prepared from ribbed mussels collected from Sandy Hook Bay.

The fuel oil will elevate the levels of the individual hydrocarbons n-C8 through n-C26, pristane, and phytane only. The recoveries of only these hydrocarbons are significantly important.

<sup>&</sup>lt;sup>4</sup> The concentrations of the individual hydrocarbons were not determined. The recoveries of individual hydrocarbons were calculated by comparing the peak areas for the hydrocarbons in the spiked extract to those in the Restek oil standard.

<sup>&</sup>lt;sup>5</sup> 25μg of each individual hydrocarbon was spiked into a mussel tissue homogenate prepared from ribbed mussels collected from Sandy Hook Bay.

Table C14. (Continued).

Sample ID	Batch No	Tissue Matrix	Hexacosane (n-C <sub>26</sub> )	Heptacosane (n- $C_{27}$ )	Octacosane (n-C <sub>28</sub> )	Nonacosane (n-C <sub>29</sub> )	Triacontane (n- $C_{30}$ )	n-Hentriacontane (n-C <sub>31</sub> )	Dotriacontane (n-C <sub>32</sub> )	Tritriacontane (n-C <sub>33</sub> )	Tetratriacontane (n- $C_{34}$ )	Pentatriacontane (n- $C_{35}$ )	Hexatriacontane (n- $C_{36}$ )	Heptatriacontane (n- $C_{37}$ )	Octatriacontane (n-C <sub>38</sub> )	Nonatriacontane (n-C <sub>39</sub> )	Tetracontane (n-C <sub>40</sub> )	Total Restek Oil
197020431 <sup>1</sup>	1	NIST SRM1974a	92.5	90.5	91.2	91.5	89.4	85.4	79.9	69.7	60.5	46.0	37.5	34.0	29.0	26.2	23.0	-
297031709 <sup>2-6</sup>	2	Depurated Mussel Homogenate	217	1880	1310	-	-	-	-	-	-	-	-	-	-	-	-	76.8
497051416 <sup>7</sup>	3	Depurated Mussel Homogenate	87.5	87.2	85.8	85.0	85.3	85.3	84.9	83.7	81.9	79.1	74.3	66.4	56.2	45.0	34.6	-

<sup>25</sup>μg of each individual hydrocarbon was spiked into a tissue matrix made from NIST SRM1974a (Organics in Mussel).

<sup>2 1000</sup>μg of Restek Diesel Fuel Oil #2 Standard (Cat. No 31233) was spiked into a mussel tissue homogenate prepared from ribbed mussels collected from Sandy Hook Bay.

<sup>&</sup>lt;sup>3</sup> The fuel oil will elevate the levels of the individual hydrocarbons n-C<sub>8</sub> through n-C<sub>26</sub>, pristane, and phytane only. The recoveries of only these hydrocarbons are significantly important.

<sup>&</sup>lt;sup>4</sup> The higher recoveries of n-C27 and n-C28 resulted from the contribution of matrix peaks at the retention times of these compounds.

<sup>&</sup>lt;sup>5</sup> The concentrations of the individual hydrocarbons were not determined. The recoveries of individual hydrocarbons were calculated by comparing the peak areas for the individual hydrocarbons in the spiked extract to those in the Restek oil standard.

The recovery of the Restek oil standard from the spiked mussel sample is calculated by the summing of the peak areas for n-C <sub>12</sub> through n-C<sub>17</sub> plus pristane for the spiked sample and the Rrestek oil standard and comparing them.

<sup>7 25</sup>µg of each individual hydrocarbon was spiked into a mussel tissue homogenate prepared from ribbed mussels collected from Sandy Hook Bay.